


F-100 Super Sabre in Action



Lou Drendel
1972

 **squadron/signal publications**
AIRCRAFT NO. NINE

\$3.95



F-100D
DETAILS



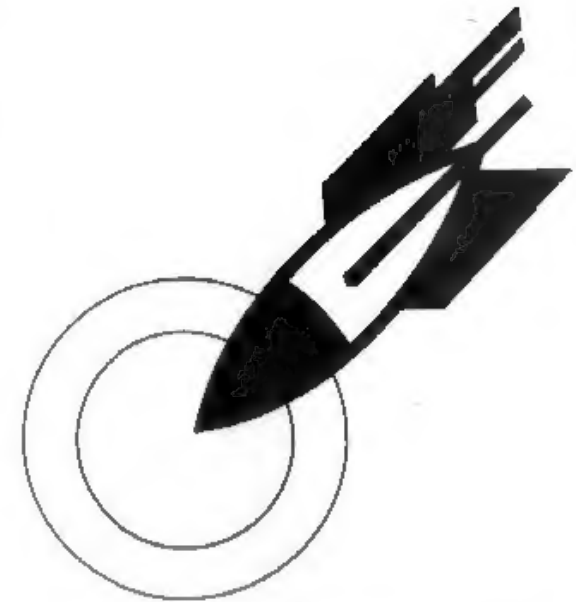


355th TFS





Fourth production example of the **F-100D** on the ramp at Edwards AFB in 1956. It is shown with four **Sidewinder AAM's** mounted on underwing pylons. The "D" variant was the first of the Super Sabres to be equipped with landing flaps, a much needed and appreciated improvement over the hot-landing "C". Early production versions also incorporated a lightweight doppler navigation system. (USAF)



F-100 gear retraction sequence is illustrated as a pair of F-100's leave North American's Palmdale facility. Total time required for gear retraction is six to eight seconds. (North American)





With its 16ft. ring slot drag parachute billowing behind it, an F-100 rolls out after landing. Note the open drag chute storage doors in the bottom of the aft fuselage. Riser cable is stowed externally in a faired recess in the left side of the fuselage, and is connected to a coupling below the rudder. (North American)



F-100D at Nellis AFB, fitted with TDU-10 Dart Target. The Dart Target can be towed up to 5,000 feet behind the tow plane, and is released upon completion of mission. (via Paul Stevens)



Picturesque piece of auxiliary equipment found on F-100 bases is the LOX bottle. (via Paul Stevens)



In 1958 someone came up with the idea of providing the Super Sabre with "instant airport", via the use of a powerful rocket engine and a flat-bed trailer. The idea was tested successfully, and the last 148 **F-100D's** to roll off the production line incorporated the necessary mods to employ this system. It was never used operationally. (North American and USAF)



F-100D's of the 510th TFS at Takhli RTAB, in May of 1962. (USAF)



TAC F-100's provided air cover for troops taking part in Goldfire I, a large scale maneuver held at Ft. Leonard Wood, Mo. in 1964. Above, Hun stands alert, and below employs cartridge starter system to "light the fire". (USAF)



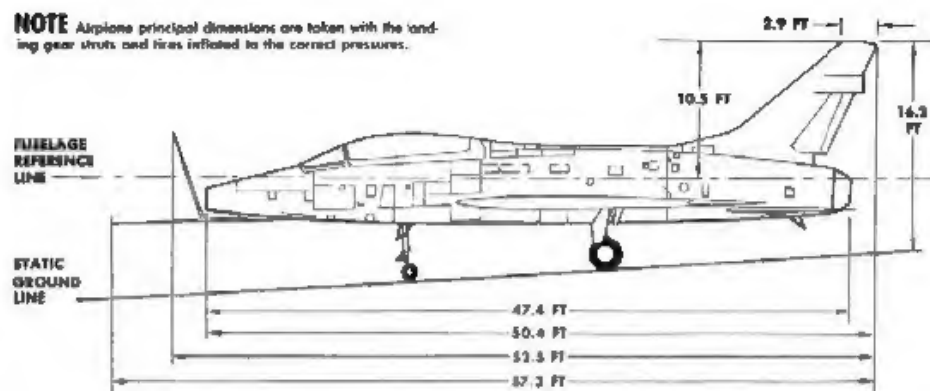


The second production F-100F (above) on the ramp at Edwards AFB in October 1957. (USAF) Cockpit and canopy details are evident in photo at left of F-100F 63750. (USAF) The first production F-100F (below) was modified by Air Force Aeronautical Systems Division to test the feasibility of steep angle landings for the X-15 and Dyna-Soar. A thrust reverser and speed brake with 200% increased area were installed in 1961. Tests included operating the thrust reverser at 6,000 feet, making a steep angle approach and landing at 230 mph instead of the normal F-100 speed of 155 mph. (via Paul Stevens)



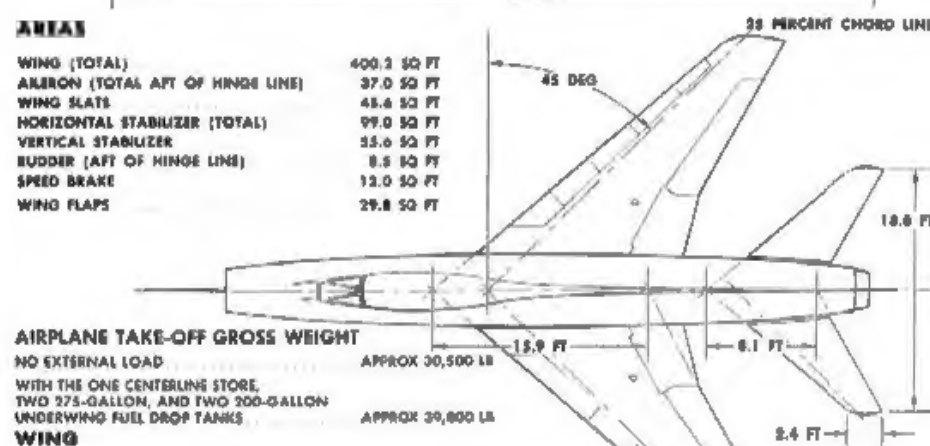


NOTE Airplane principal dimensions are taken with the landing gear struts and tires inflated to the correct pressures.



AREA

WING (TOTAL)	400.3 SQ FT
AILERON (TOTAL AFT OF HINGE LINE)	37.0 SQ FT
WING SLATS	45.4 SQ FT
HORIZONTAL STABILIZER (TOTAL)	99.0 SQ FT
VERTICAL STABILIZER	33.0 SQ FT
RUDDER (AFT OF HINGE LINE)	8.5 SQ FT
SPEED BRAKE	12.0 SQ FT
WING FLAPS	29.8 SQ FT



AIRPLANE TAKE-OFF GROSS WEIGHT

NO EXTERNAL LOAD	APPROX 30,500 LB
WITH THE ONE CENTERLINE STORE, TWO 275-GALLON, AND TWO 200-GALLON UNDERWING FUEL DROP TANKS	APPROX 30,800 LB

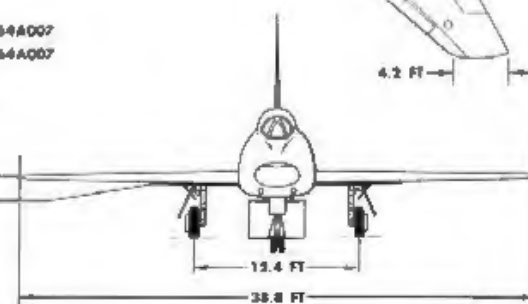
WING

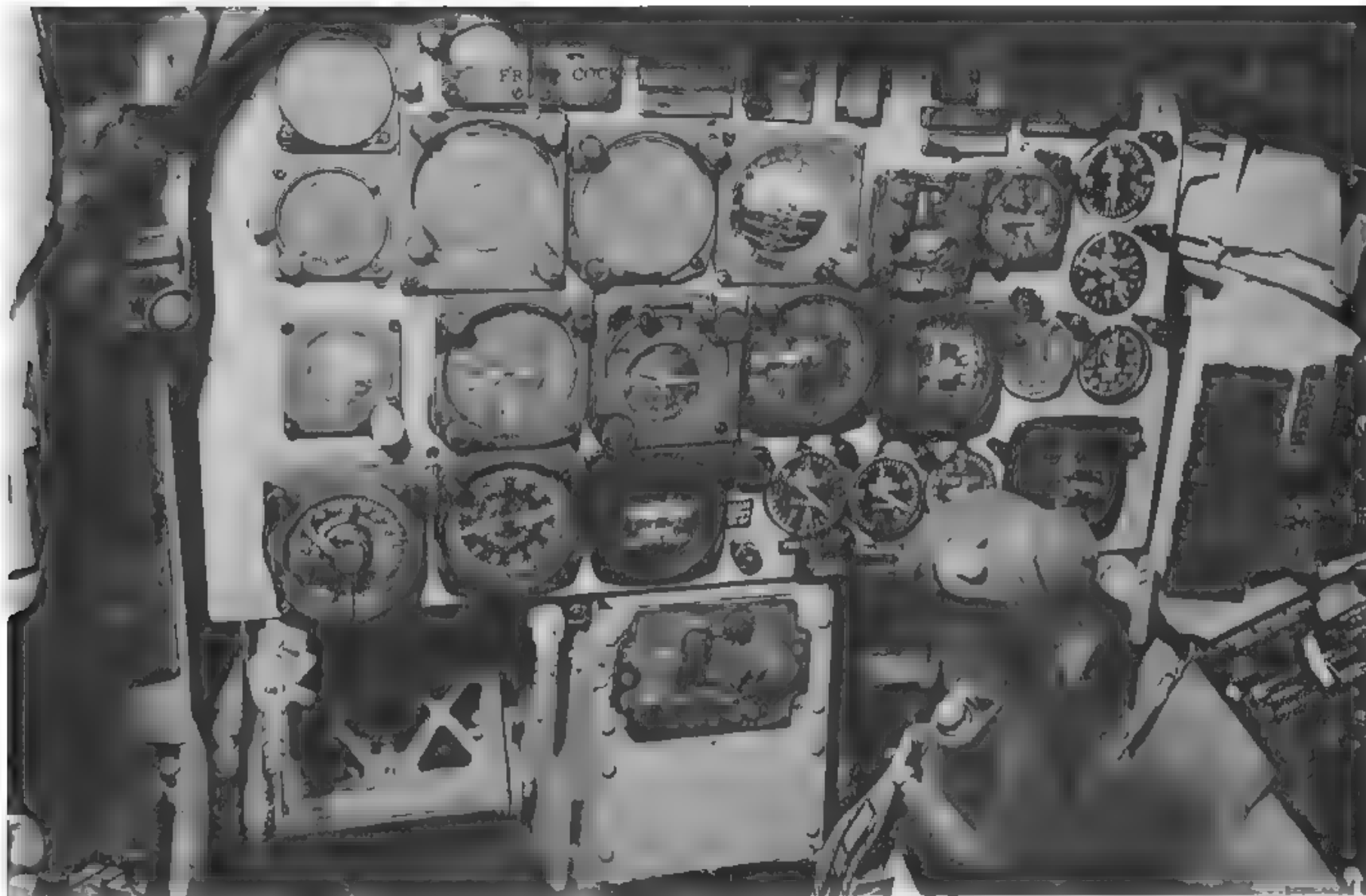
TYPE LOW

AIRFOIL SECTION

ROOT	NACA 64A007
TIP	NACA 64A007
INCIDENCE AT ROOT	0 DEG
INCIDENCE AT TIP	0 DEG
ASPECT RATIO	3.72

DHEDRAL	0 DEG
WING	0 DEG
STABILIZER	0 DEG
NORTH AMERICAN AVIATION F-100 F	





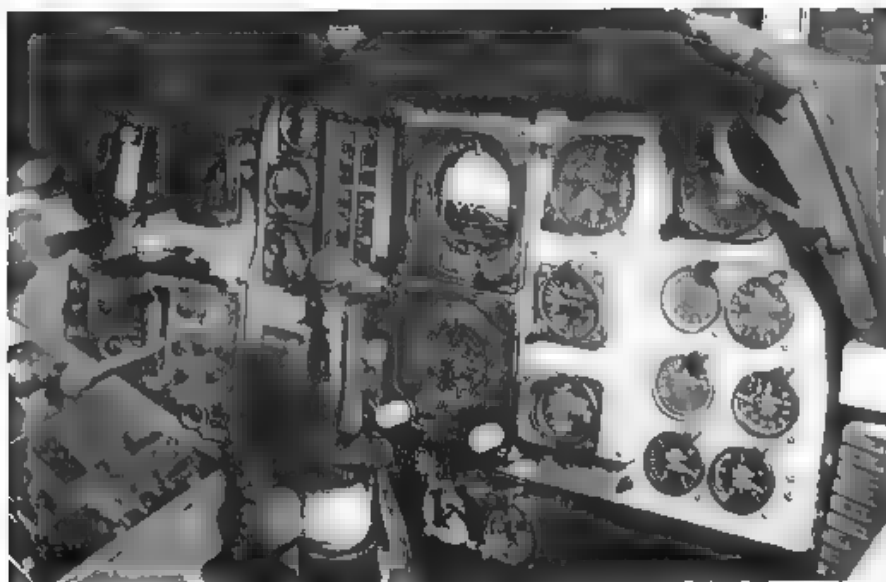
Forward cockpit of F-100F. Though originally designed as trainer version of the Super Sabre, the "F" wound up performing one of the most dangerous and demanding combat assignments awarded the F-100, that of high speed FAC over North Vietnam. These F 100's were known as "Misty FAC's". (North American)

F-100 Super Sabre in Action

by Lou Drendel



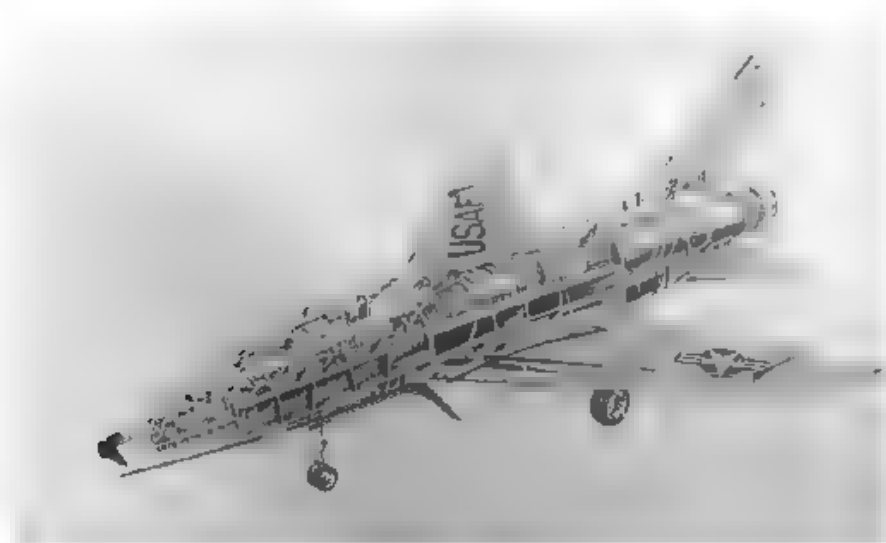
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Rear instrument panel of F-100F. Note "tape" type airspeed indicator on left side of panel (North American)



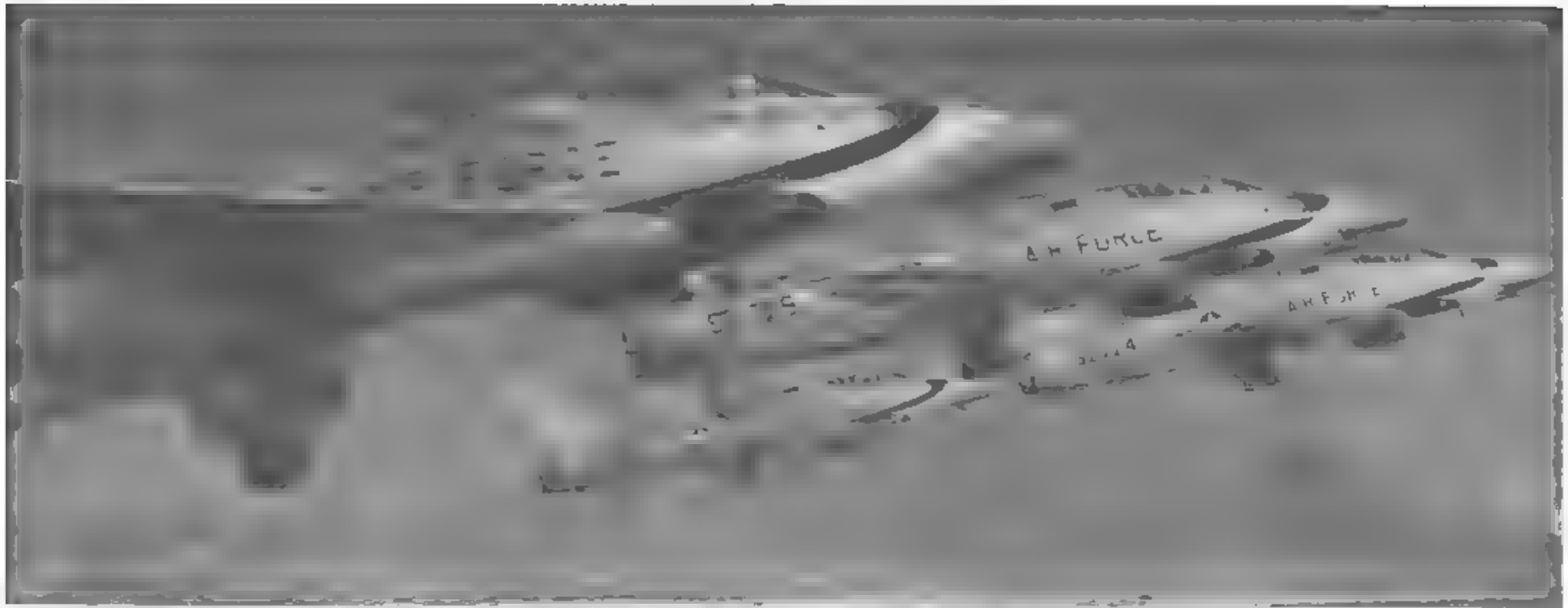
F-100F on final approach to RAF Wetherfield in 1969. This Super Sabre belonged to the 20th TFW. Note centerline store, and its position relative to speed brake (George Pennick)



Cutaway view of F-100F, showing principal components. Note fuel cells immediately above and in the wing (North American)



Overhead plan view of F 100F. The opened IFR hood is clearly visible in the rear cockpit. Also note position of split leading edge slats. (North American)



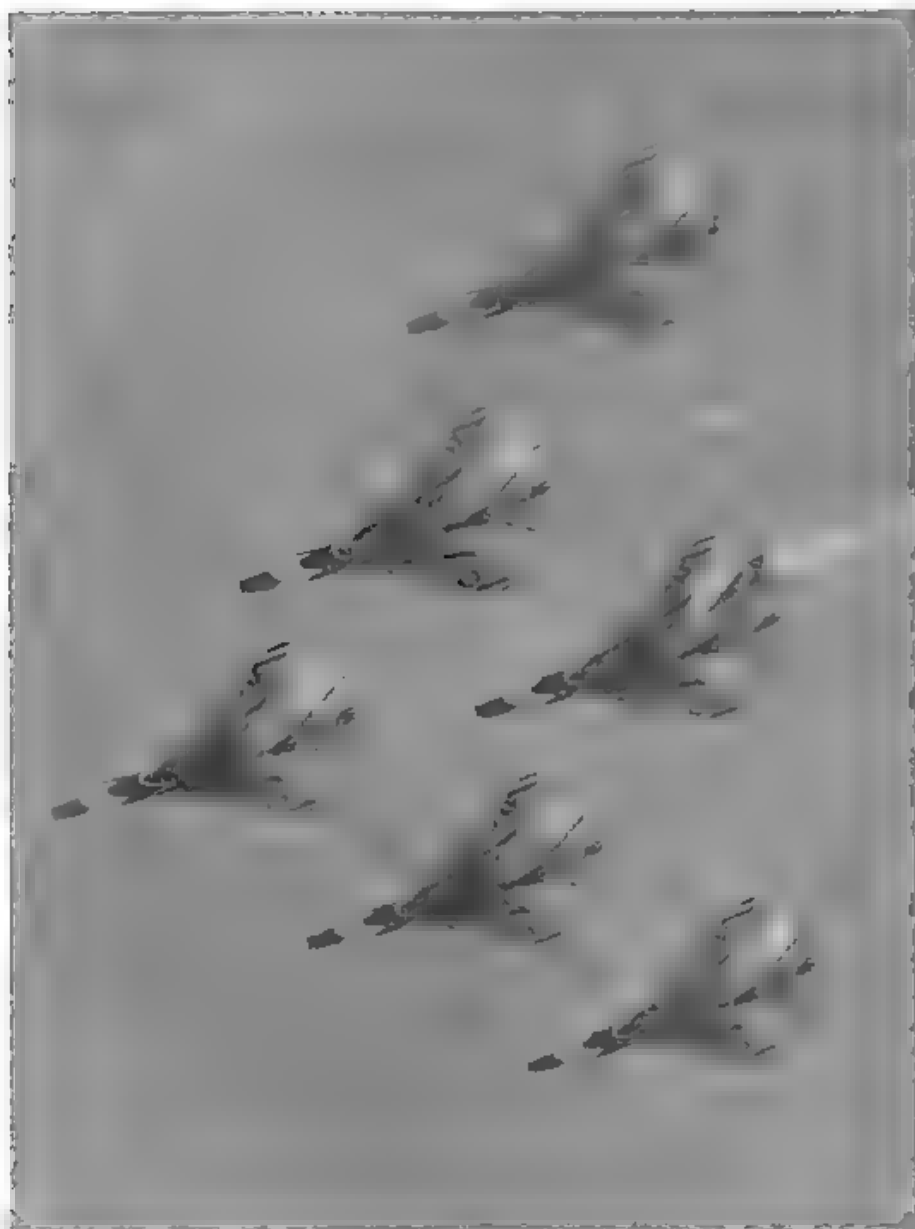
Thunderbirds take off from Nellis AFB in their first F-100's (USAF)



Thunderbird solo pilots give the troops at Nellis a thrill with their patented head on knife edge pass (USAF)



F-100D of **Thunderbirds**. Note plumbing for smoke system atop fuselage at bottom of vertical fin (Paul Stevens)



Thunderbirds diamond wedge formation. Over seventy million people, from all over the world, saw the Thunderbirds perform in their F-100's.



F-100F-15-NA of the Thunderbirds was destroyed, and both pilots killed, in a mid-air collision. The other F-100 landed safely. (Paul Stevens)



F-100D of Capt. Merrill A. McPeak. McPeak was flying this Super Sabre at an air show in 1967, when both wings came off during vertical roll. Later investigation indicated fatigue cracks, which were prevalent among most operational 100's, had caused structure to fail. This precipitated grounding of Thunderbirds F-100's, and a 4G limit being placed on all other operational Super Sabres. Modification program which cost \$620,000 eventually fixed problem and the F-100 continued to soldier on. (Paul Stevens)



Foreign Super Sabres. A pair of inquisitive ground crewmen peer into the office of an F-100D of the French Armée de l'air's 11th Escadron de Chasse. (via Paul Stevens)



F-100D of the Royal Danish Air Force. Super Sabres are also operated by the air forces of Nationalist China and Turkey. (via Paul Stevens)



F-100F of the Armée de l'Air on final approach to Toul-Rosieres Air Base in 1971. (Peter Zastrow)

THE HUN GOES TO WAR

It was kismet that the USAF's first supersonic fighter would be the first of the "century series" to be blooded in combat. The Super Sabre was approaching what many thought to be the limits of its operational life when the war in Southeast Asia flared anew in 1964. The F-100 was on the threshold of the most illustrious chapter of its history.

Ten years had passed since the French evacuation of Indo-China, the subsequent Geneva Conference, and the partitioning of Vietnam. Eight years had passed since the deadline for nationwide Vietnamese elections, and Ho Chi Minh's communists were about to abandon their covert war against their neighbors in South Vietnam, Laos, and Cambodia, in favor of all-out general warfare. Confident that ten years of guerilla war had so weakened the governments of these countries that they were on the brink of collapse, Ho ordered his armies to attack on all fronts. He envisioned the reunification of all of Indochina under the red banner of Hanoi.

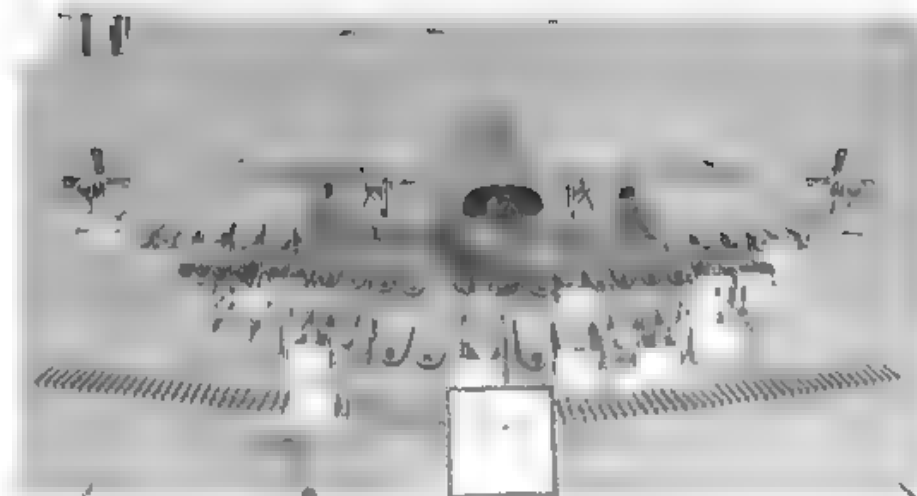
In June of 1964, Ho's troops broke the truce line in Laos with an attack on Royal Laotian positions, and a rout of the international Control Commission which had been policing the truce. Upon request of the Laotian government, the U.S. Navy began reconnaissance flights of the battleground with carrier-based RF-8's. The loss of two RF-8's, on successive days, inspired the first tactical air strikes against communist anti-aircraft sites. F-100's from Clark AFB in the Philippines, attacked the enemy positions and the Hun had received his baptism by fire.

The U.S. willingness to retaliate did not deter Communist aspirations, and as a further sign of their belligerence they attacked U.S. destroyers in the Gulf of Tonkin with torpedo boats. This brought the first strike upon the North Vietnamese homeland in retaliation. It also prompted the stationing of the first U.S. tactical fighter squadron on South Vietnamese soil, with the deployment of an F-100 squadron from Clark AFB to Danang AB. The communist attack on Pleiku in February of 1965, that took 29 American lives, inspired the beginning of the aerial interdiction campaign against North Vietnam that would continue until the end of the war in January of 1973. To support this air war, the USAF in 1965 deployed F-4's, F-105's, and F-100 wings from England AFB and Cannon AFB. The F-100 was well on the way to becoming the dominant tactical air support fighter in the Vietnam air war.

The same month that communist troops were launching their attacks in Laos, the USAF was graduating its sixth class from the Air Force Academy. Among the members of that graduating class was a young Air Force officer who would fly more than 300 combat missions in the F-100.

Upon graduation from the Air Force Academy, Jim Wallace was accepted for Air Force pilot training and reported to Webb AFB, Texas for T-37 and T-38 training. He graduated from Webb in 1965 with a high enough class standing to ensure his choice of aircraft. He chose F-100's and was ordered to Luke AFB, Arizona for F-100 check-out with the 4514th CGTS. Wallace completed his F-100 check-out in early 1966, and was ordered to report to the 416th TFS, at Tan Son Nhut AB, RVN, for combat duty. His combat tour would last for a year and would include a broad cross-section of missions. Some of his most interesting missions, and the most interesting and challenging duties undertaken by the venerable Hun are related here.

By the spring of 1966 the air war in Vietnam had assumed the general definition it was to retain throughout its long and bitter tenure. The "in country" air war was

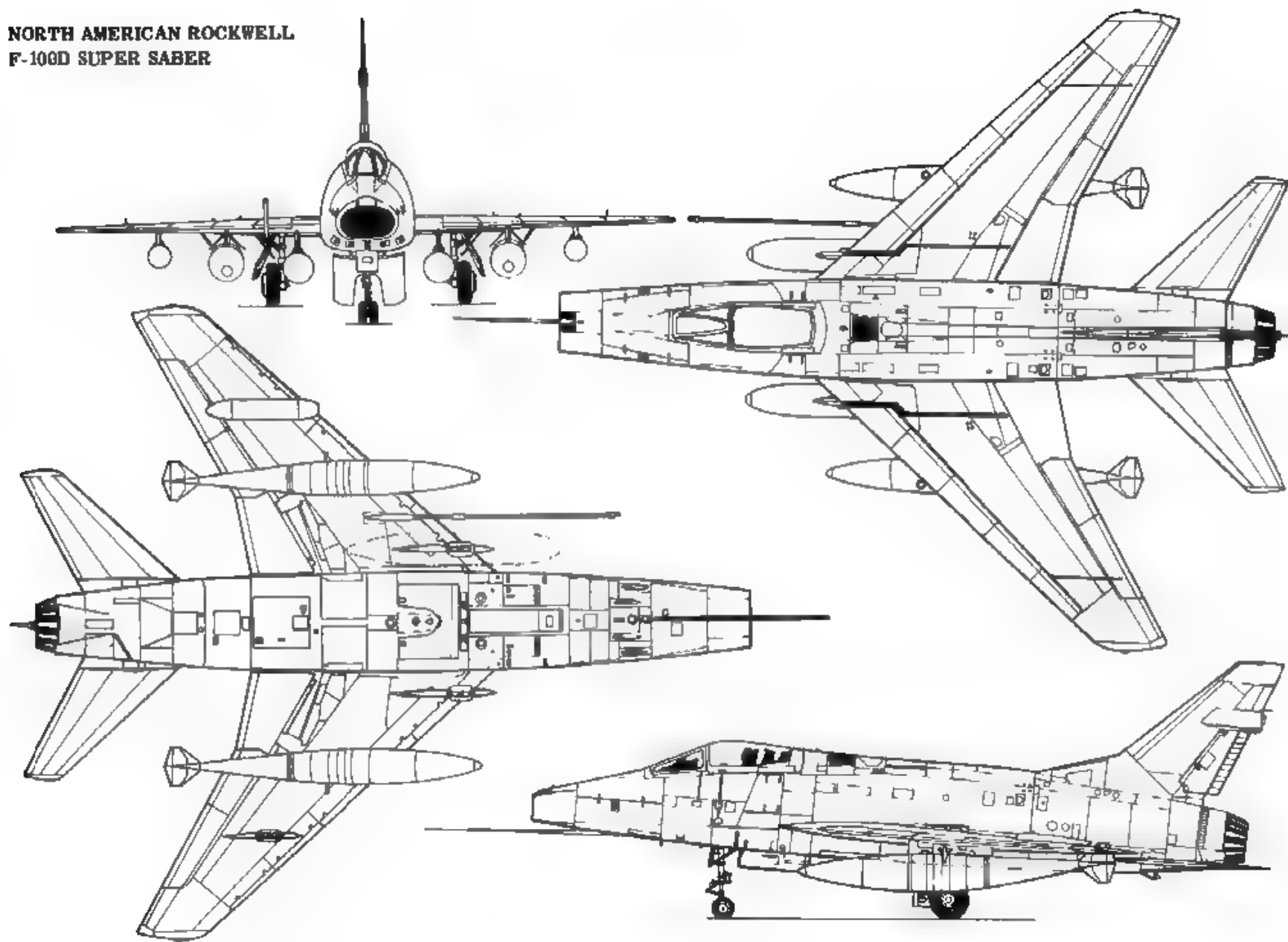


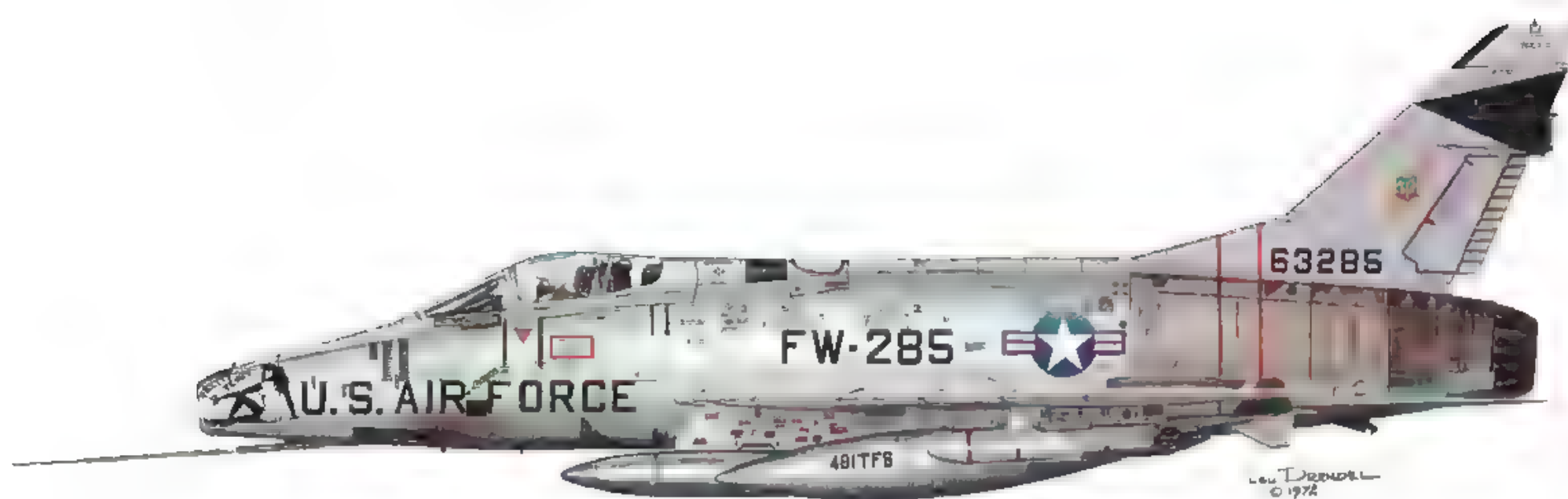
F-100 poses with the various types of ordnance it is capable of delivering. Worthy of note are the Snakeye high drag bombs, (on either side of the wingtips) with fins extended (USAF)

one of tactical air support for allied troops. The "out country" war was a campaign of aerial interdiction of troops and supplies in North Vietnam and the tributaries of the Ho Chi Minh trail which snaked their way through Laos and Cambodia. As it was the first of the century series to see combat, the F-100 would also be the first fighter to experiment with new techniques required for the demanding missions of air support against a wily and determined enemy. One of the hairiest of these missions (from a pilot's point of view) was the close support mission at night. Jim Wallace elaborates on these missions.

"In the early stages of the war's aerial development, the concept of low altitude night weapons delivery was in a state of experimentation. This type of employment came to be known as **Night Owl**. With no previous experience in this type of warfare to fall back on, commanders generally relied heavily on their most experienced combat pilots to work out the procedures and tactics which would provide the most accurate weapons delivery with the greatest safety for the aircrews involved. At its inception, the concept of low level high speed night conventional weapons delivery was considered so dangerous that each sortie had to be authorized by the commander of 7th Air Force and the aircrews involved were awarded a **Distinguished Flying Cross** for each mission that they went on. Delivering 20mm strafe, napalm, high drag bombs, and CBU under the unpredictable and shadowy light of magnesium flares, the pilots soon found that extremely accurate weapons delivery was possible. In addition, although the flying was indeed hazardous, due to poor visibility, unknown terrain, intense vertigo problems, and night vision reduction, a bonus was soon realized by the jet jockeys. By turning out their exterior aircraft lights, the enemy ground forces could not see the fighters. Therefore, any ground fire directed at the attacking aircraft was usually aimed at the sound, (considerably behind the actual aircraft) or at the shadow created by the light of the flares.

**NORTH AMERICAN ROCKWELL
F-100D SUPER SABER**





F-100D of 481st Tactical Fighter Squadron, based at Tan Son Nhut Air Base, RVN, summer of 1965.
 "Pretty Penny" was flown by 1/Lt. Peter Vanderhoef and 1/Lt. Gerry Sloane. It was named for Sloane's wife.





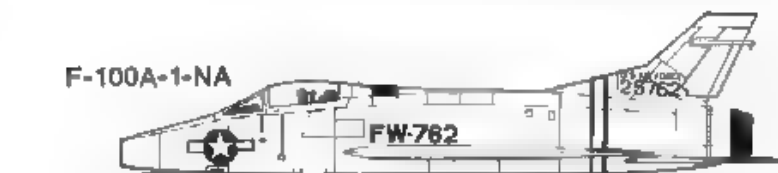
1/Lt. Jim Kempton, of the 481st TFS, with his F-100D, 0-53622 "Lickity Split" (Tom Lowe)



F-100F-11-NA of the Iowa Air National Guard at Des Moines in 1972. Note the variations in camouflage colors, and how the paint has been effectively removed from rear of fuselage by heat. (Douglas Słowiak)



YF-100A



F-100A-1-NA



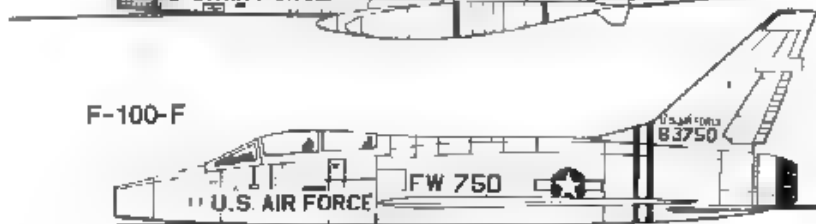
F-100A-20-NA



F-100-C



F-100-D



F-100-F

Until a formal Night Owl training program was initiated in the United States, in 1967, the usual method of becoming "Night Owl Qualified" was strap an aircraft tightly to your body, takeoff with one of the "veterans", and let him calmly describe what you needed to do and what to watch out for. Those that didn't come back were generally felt to be "Unqualified". Those that refused to go (jokingly) were generally felt to be of a higher intelligence level than the rest of us."

The sheer technical problems of accomplishing any degree of success in night ordnance delivery are staggering, and require a high degree of pilot skill and fortitude, to say nothing of a mighty good airplane. One of these problems involved the design of the F-100 cockpit. The armament control panels are situated directly behind the throttle, or roughly, under your elbow. In order to change from one mode of delivery to another, the pilot was forced to lean to his left and turn his head. At night, on instruments, this is a sure fire recipe for a panic inducing case of vertigo. Another problem was the light of the flares themselves. Since it was a very bright, white light, it generally wiped out the ground color, thereby reducing the pilot's depth perception. Further depth perception problems were caused by the single source of light and the weird, wavering shadows it caused. And finally, the very nature of the mission indicated the urgency of getting your ordnance smack on target. The targets were usually troops in contact, sometimes in trench to trench fighting. You just couldn't afford to be even fifty feet off, and this caused the pilots to press in even closer than normal, with the ever-present possibility that a tree or a hill might jump out of the blackness at you on your recovery. Jim Wallace had a very eventful night checkout, and a very successful one. This is his version of that mission:

"My own combat checkout occurred during the night of July 24, 1968. On that evening, Captain Bill Hayes and myself (new guys) and Captain Paul de San Martino (old head) were alerted that an ARVN platoon in the area southeast of Saigon was under attack and needed immediate assistance. Arriving at the scene armed with BLU-1B (napalm), and 20mm strafers, the flight set about analyzing the task at hand. With strong heart and meaningful verbal instructions, Captain de San Martino directed the two fledglings in their attack, while attempting to assure his own survivability. (Wallace and de San Martino were in an F-100F. Wallace flying, while Hayes was flying a 'D' model of the Hun.) After countless passes we departed the target area with barely enough fuel to recover at home base. Outbound from the target the FAC gave us his strike report. He stated that all enemy action had been curtailed, an estimated 100 Viet Cong had been killed, (Later confirmed at 136) and that two major gun positions (Quad 50's) had been destroyed."

In addition to its close support duties in the south, the F-100 also played a role in the air war over North Vietnam. One of its missions over the north was acting as lead for other fighter-bombers on radar controlled bombing missions. Early in the air war, the F-100 was one of the few types to be equipped with the radar bombing equipment, known as "Skyspot". Skyspot was originally intended as a means to score theoretical bomb drops during peacetime exercises. The pilot would "pickle" his imaginary bomb load, and a radar observer on the ground, using Skyspot, could tell where the bombs would have hit. By reversing the procedure, real bombs could be dropped on real targets using ground initiated commands. In this way the fighter bombers could bomb through an overcast. A rather dry, uninteresting mission from the sound of it, but some of these missions were dry only in terms of the pilot's mouths, and were far from uninteresting.



Jim Wallace poses in front of his F-100, prior to a mission early in his tour. (Jim Wallace)



Super Sabre, with Napalm mounted outboard, delivering a high drag bomb from one of the inboard stations. Extended fins will slow descent of the bomb, allowing the F-100 to escape blast at low delivery altitudes. (USAF)

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INTRODUCTION

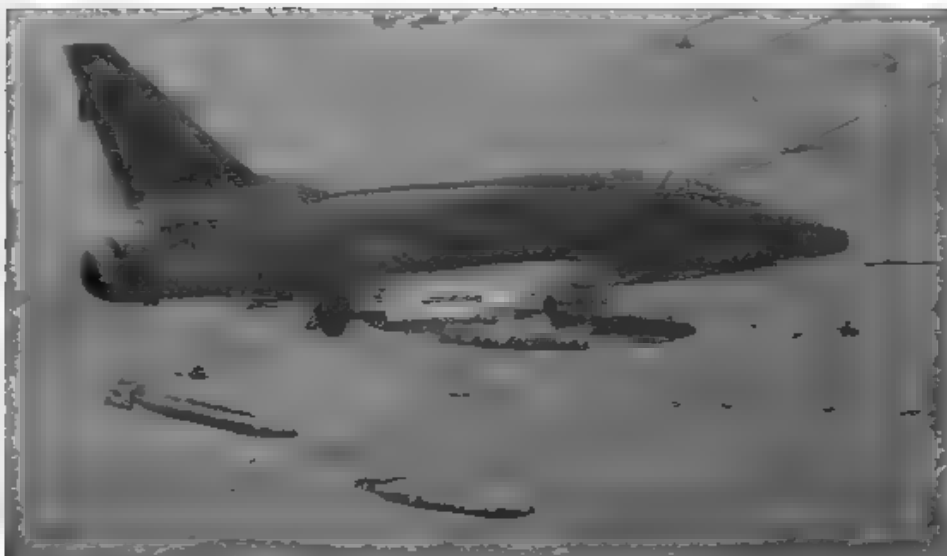
The **Aircraft in Action** series is a new concept. Between the covers of this book will be found some of the finest photographs of aircraft ever taken. Text has been kept to a minimum, since we feel that there are many books available dealing with the aircraft in detail, but lacking in photos that the discriminating collector and modeler is seeking.

These photographs come from many sources and show primarily aircraft under operational conditions. At least 90 percent of the photographs in this book have never been published before and it is our hope that you, the reader, will enjoy them for what they are.

Lou Drendel, Uwe Feist

Photo Credits.

**USAF
North American
Lou Drendel
Paul Stevens
George Pennick
Peter Zastrow
Jim Wallace
Tom Lowe
Dave Menard
Norm Taylor
Ward Boyce
Douglas Slowiak**



Pair of napalm bombs falls away from F-100 of the 416th TFS during 1966 mission against VC positions in South Vietnam. (USAF)

On November 2, 1966, Silver 11, a flight of two F-100D's assigned to the 416th TFS, and operated under 7th Air Force's "Operation Southern Brother", at Danang AB, RVN, were assigned to lead a flight of four F-105's from Takhli RTAB on a radar controlled bombing mission in the coastal area of North Vietnam. The bombing run went as planned and, after completing their primary mission, Captain Arthur J. O'Connell (Silver 11) and Lt. Jim Wallace (Silver 12) joined the F-105's for a period of low level high speed armed reconnaissance along an assigned road segment. The six American fighters streaked low over the lush green countryside, six pairs of eyes searching for North Vietnamese military traffic. As they approached bingo fuel state for the F-105's, the weather began to deteriorate. The ceilings were down to 3000 feet, and there were intermittent rain showers hampering visibility. No targets of value had been spotted, and the F-105's bid their Danang based companions farewell, as they turned west and climbed through the overcast, on course for Takhli. During the briefing for this mission, the Intelligence Officer had warned them to be on the lookout for a newly constructed SAM site, and the hope of finding such a choice target, coupled with their still favorable fuel state, had convinced them to continue their reconnaissance.

They had carried no bombs on the bombing mission, since it was virtually impossible for a heavily laden F-100 to keep up with the F-105's, but they still had 800 rounds each of 20mm HEI (High Explosive Incendiary) for their nose-mounted M-39 cannon. The destructive power of the 20mm shells would easily overcome any lightly armored vehicle, and each F-100 would be spitting out over 100 of these deadly missiles a minute in their strafing runs.



Hun firing 2.75 FFAR's at VC position. Note low delivery altitude, which made Hun drivers the premier close support people of the air war in the south. (USAF)

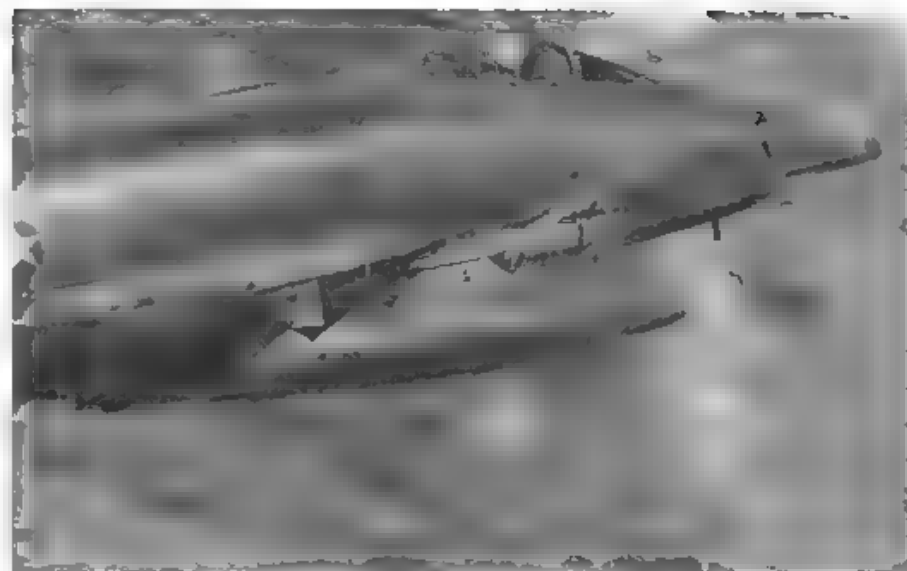
The weather continued to deteriorate as the two fighters roared south, condensation trails streaming out behind them in the warm, humid air. As they popped over a small ridgeline, they were confronted by their quarry! They had chanced upon the newly constructed, equipped, and manned SAM site. As they roared over the North Vietnamese position, it was evident that they had caught the enemy completely by surprise. Gunners and technicians were running for cover or gun positions. O'Connell knew that it wouldn't take the enemy gunners long to get into action, and that they would throw up a murderous torrent of flak and tracer to protect their newly established position. He immediately established the attack plan: high speed linking, low angle opposed strafing passes to neutralize the site and destroy as much of the equipment as possible. They would try first for the heart of the site, the radar equipment, knowing that they might sacrifice themselves in doing so because of the fierce opposition of the site gunners.

The two Super Sabres broke in opposite directions and, dodging behind conveniently located hills, began to curve back around for their firing passes. The communist gunners were ready for them and as they roared into sight low over the trees, the enemy opened up with everything he had. Rapid fire 57mm and 50 caliber lit up the valley, creating a leaden gantlet for the two F-100's to run. They bored in to point-blank range, O'Connell after the radar dish, while Wallace went for the control van in the center of the complex. The throaty roar of their 20mm was added to the frantic din of anti-aircraft fire. The two Super Sabres were on a converging course at better than 500 knots of airspeed each. The 20mm HEI was erupting from the cannon in cascades, some of it exploding in the air in front of them as the shells went

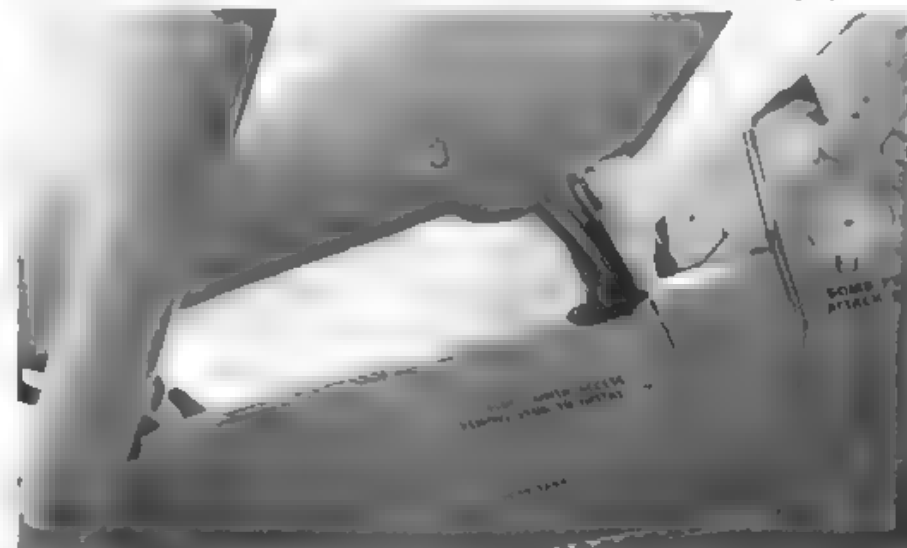
supersonic and then came back through the sound barrier. But enough of the deadly cannon fire was finding it's mark. The nerve center of the site was a shambles, the radar dish riddled and shredded the control van little more than a pile of irreparable junk. The two F-100's flashed past each other and, jinking wildly to throw off the enemy gunner's aim, headed for the high hills surrounding the site. Again they maneuvered behind the hills, and again they flashed out, charging for the SAM site like enraged predators. On this pass O'Connell hit a liquid fuel storage tank. The tank blew it's top, sending a pillar of flame shooting straight up. The glare of this fire lit up the gloomy valley, exposing the concealed positions of the SAM missiles themselves. Wallace went after a missile and it's launcher, shredding both and killing the crew. As they recovered from this pass, O'Connell asked for Wallace's fuel state. They were both getting dangerously low, and he opted for one more pass, followed by a high speed low altitude exit of the area. On their last pass, O'Connell attacked a missile and trailer/launcher, while Wallace demolished an assembly van. The enemy gunners, undaunted by the repeated attacks, had continued to put up a fierce defensive fire. But the elusive tactics of the two Hun drivers had prevented a single enemy shell from finding the vitals of their mounts. They completed their final firing runs on the site, and bent their birds into hard turns away from the wrecked installation. On their way back to Danang they radioed the Air Force's flying command post describing the target, it's location, and the damage they had inflicted. As a result of this information, follow-on flights of F-105's were directed to the SAM site, and they finished the job started by the Super Sabres. For their aggressive actions Wallace and O'Connell were awarded The Air Medal. It was the sixteenth time Jim Wallace had been favored with this decoration.

This was by no means the only attack or the most successful attack on North Vietnamese defenses by F-100's. The Super Sabre was the first jet aircraft to be used over the north on regularly scheduled missions. The first anti-SAM missions were flown in F-100F "Wild Weasel" aircraft, and the pilots faced tremendous odds with very simple and somewhat unreliable equipment. This type of mission was eventually taken over by the F-105. The Southern Brother operation resulted in other significant encounters with Ho Chi Minh's defenses, and later in the war the F-100F was again employed.

The mission related above was the forerunner of many such missions, which came to be flown under a regularly scheduled program known as "Commando Sabre". On these missions, two seat F-100F's, using the call sign "Misty" (hence the popular pseudonym "Misty FAC") operated over North Vietnam as high speed forward air controllers. (Jets were chosen for this duty, as it was felt that they would have a much higher survivability than the slower O-1 and O-2 aircraft.) The Misty FAC's would go into some of the most heavily frequented supply routes looking for targets, and trouble. They were in constant contact with the Airborne Battlefield Command and Control Center and, upon sighting a target, would call for strike fighters to join them. When the strike fighters arrived on the scene, the FAC would dive on the target, marking it with smoke rockets. A mission of this type might last several hours, with numerous refuelings over the Gulf of Tonkin. Misty FAC completed operations in June of 1970. The high speed FAC duties pioneered by the F-100's were taken over by F-4D's and E's.



Waiting for the FAC to mark a target, Hun circles expectantly. (USAF)



Closeup of inboard section of wing slat. (Note bullet hole) Slats are actuated automatically by aerodynamic pressures. (Usually a function of the speed of the aircraft, however, high angles of attack at high mach number will also actuate the slats.) (Tom Lowe)



416th TFS Hun enroute to a target in 1965. Zealous censor has removed TAC badge from tail. (USAF via Dave Menard)



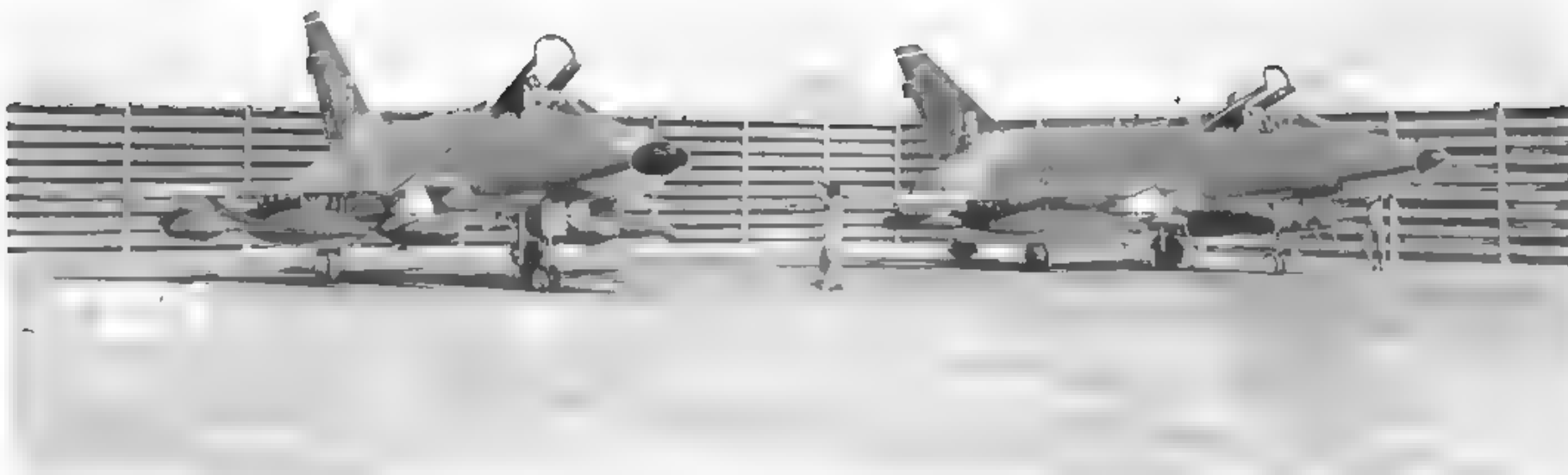
481st Super Sabres on plch out over Saigon, post mission 1965. (USAF)



Forward looking camera on F-100 centerline catches a covey of 2.75 rockets streaking towards a VC hideout in the Mekong Delta of South Vietnam. (USAF)



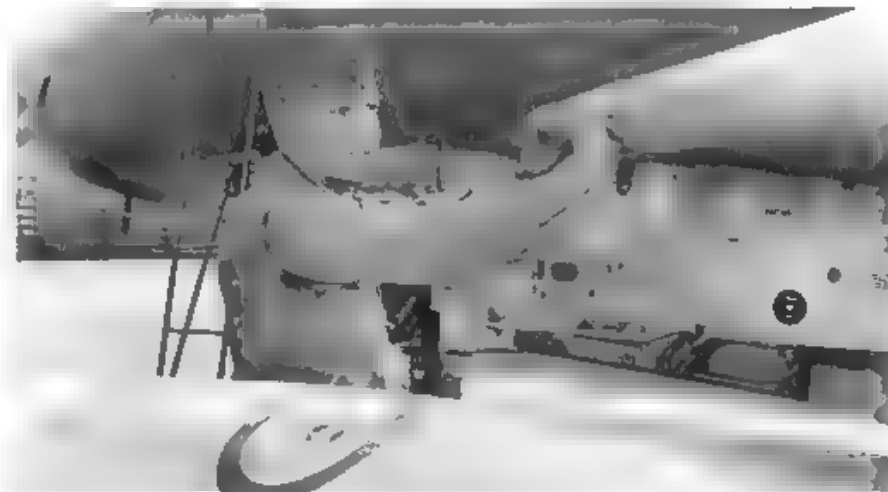
416th TFS



Crew chiefs of the 812th TFS, 35th TFW, out of Phan Rang AB, RVN, make last minute inspections of their birds before waving them out of their revetments at Phu Cat AB, for another mission against the Viet Cong in 1971. (Norm Taylor)



One reason why the VC don't celebrate St. Patrick's Day This greeting was delivered from Bien Hoa by a 3rd TFW Hun. Note outboard pylon details (USAF)



Capt Ron Green bids fond adieu to the F-100 he flew 231 combat missions in without taking a single hit from enemy fire in a year of flying over South Vietnam (USAF)



Loading bombs on a Huey of the 307th TFS at Bien Hoa in the fall of 1965. Bands on tail are light blue. (USAF via Dave Menard)



SUU 7A CBU dispenser mounted on outboard pylon. CBU consists of 19 tubes, each containing bomblets of various destructive power. Used mainly as an anti-personnel weapon where coverage of a large area is desired. (Tom Lowe)



Well worn F-100D-61-NA of the 31st TFW over the coastal regions of South Vietnam, December 1968. (USAF via Norm Taylor)



Lt Peter Vanderhoef with "Pretty Penny". (Subject of color side view on page 25) Vanderhoef was the artist responsible for decoration of the 481st TFS F-100's.



Close-up of F-100D-25-NA of the 481st TFS. This was personal aircraft of Lt /Col Hal Comstock, WWII P-47 ace with 7 kills over German aircraft. (Note kill marks on nose) Skull insignia is same as that carried by Col Comstock on his P-47 Aircraft was later transferred to 418th TFS. (See color profile on rear cover.) (Tom Lowe)



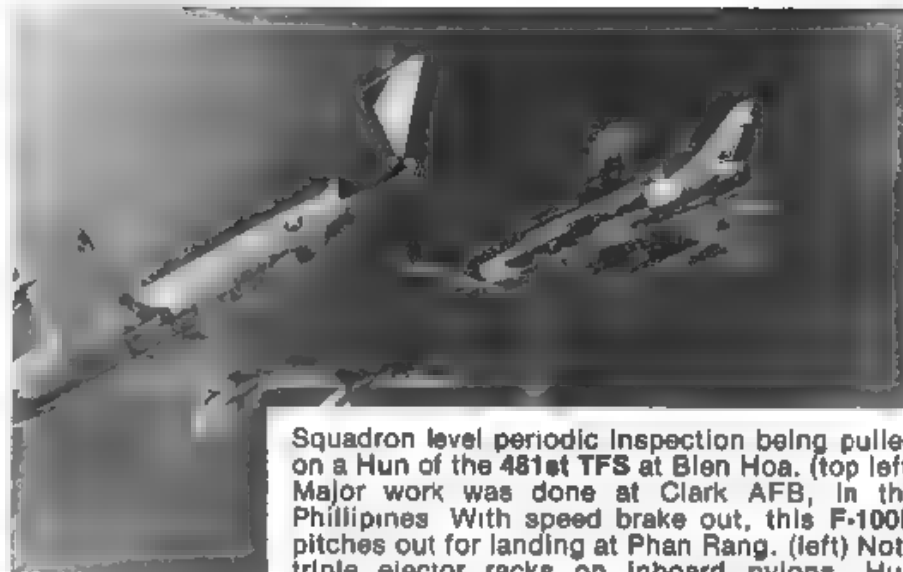
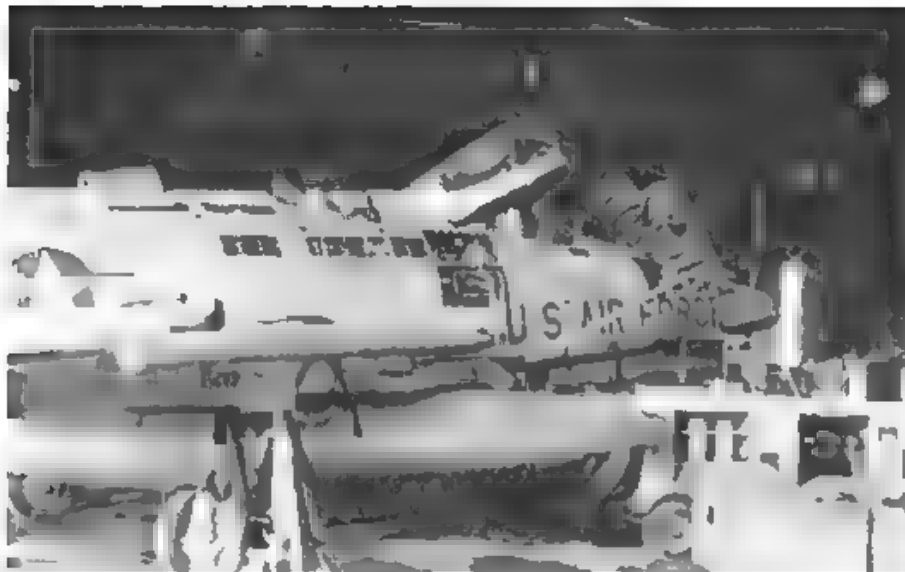
416th TFS Hun about to strafe VC positions in late 1965. (USAF via Dave Menard)



481st Super Sabre pulls off of a target. (USAF via Dave Menard)

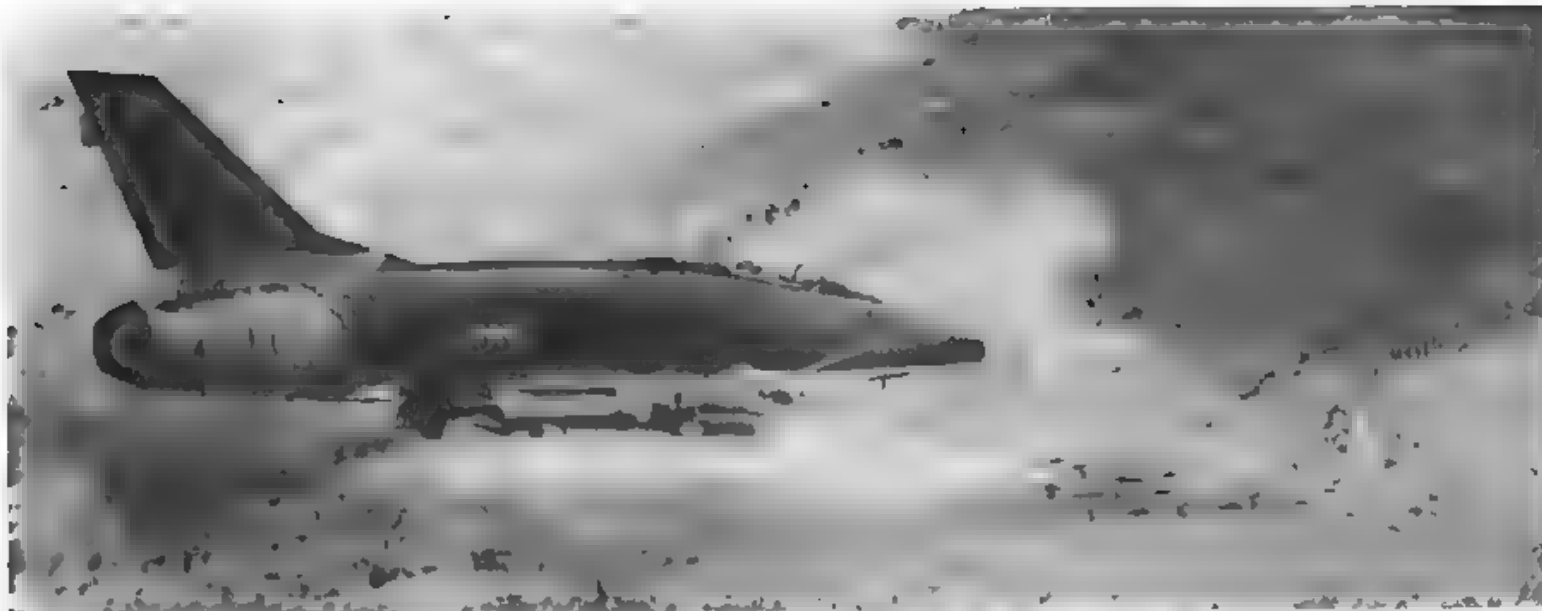


"My Gal Sal III", an F-100D-71-NA of the 418th TFS came to grief, overrunning the runway at Phu Cat AB, in January of 1969, as a result of a broken hydraulic brake line (USAF via Norm Taylor)



Squadron level periodic inspection being pulled on a Hun of the 481st TFS at Bien Hoa. (top left) Major work was done at Clark AFB, in the Philippines. With speed brake out, this F-100D pitches out for landing at Phan Rang. (left) Note triple ejector racks on inboard pylons. Hun refueling from a KC-135 enroute to target. (top) Capt. Joe Reynes had gun bay doors blow off, impaling themselves on inboard pylons, during a mission with 481st TFS. (bottom) (Tom Lowe, USAF, and Norm Taylor)





2.75 FFAR's flashing away from F-100, toward enemy positions in South Vietnam. (USAF)



8th TFW



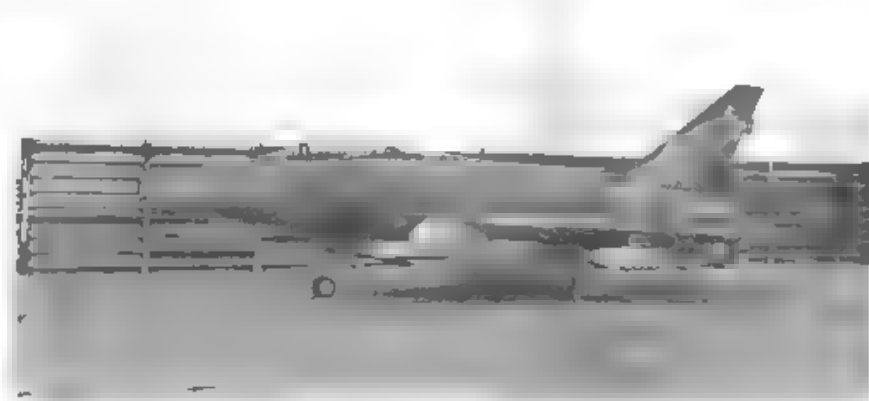
Super Sabre of the 612th TFS, 35th TFW, loaded for a mission from Phu Cat AB, in March of 1971. (Norm Taylor)



F-100D-86-NH of the 614th TFS, loaded with 500 lb. **Snakeye** bombs, in revetment at Phu Cat AB. Note detail of nose probe fold. (Norm Taylor)



F-100F-16-NA, of the 352nd TFS, at rest between missions, Phu Cat AB, February 1971 (Norm Taylor)



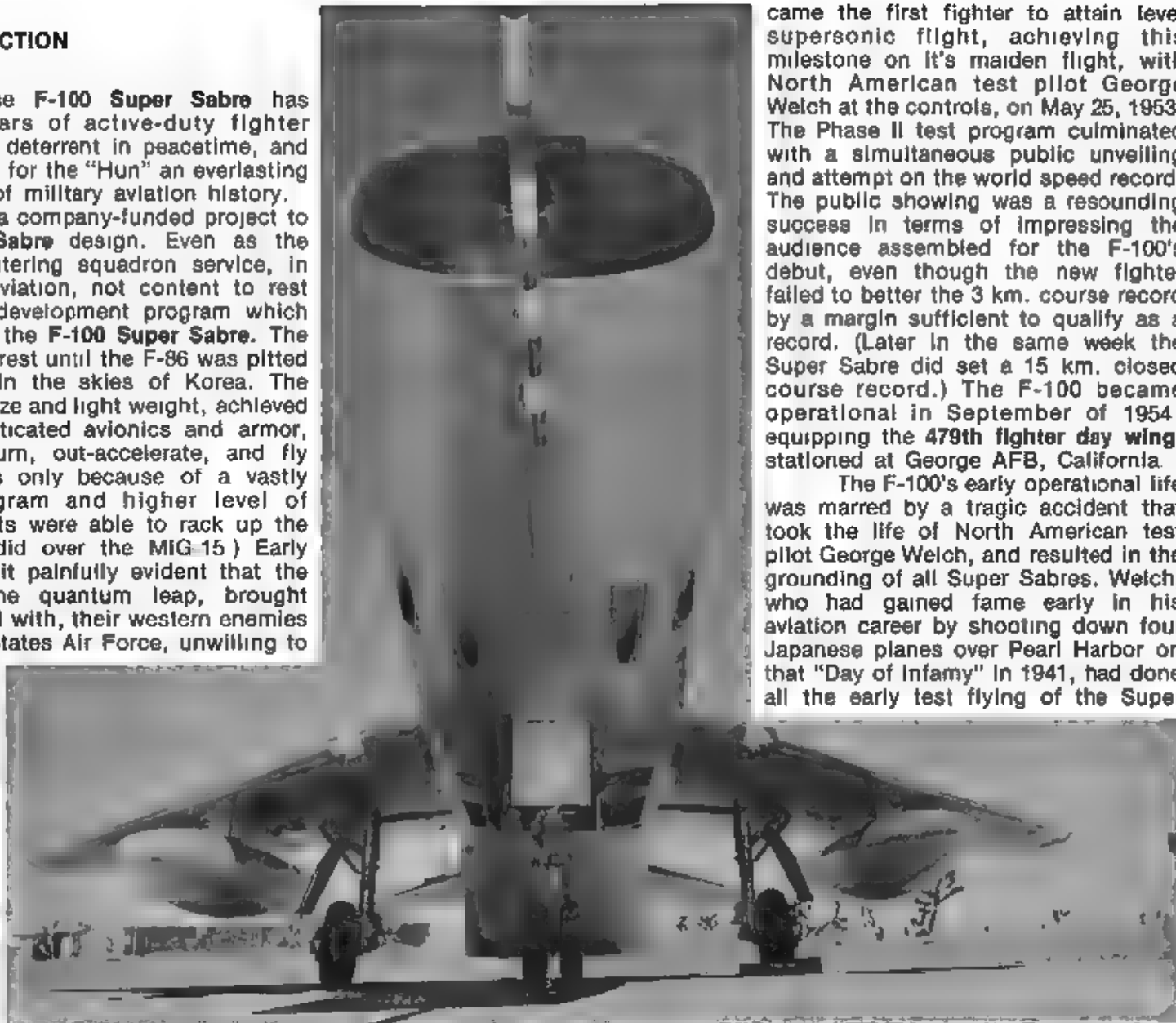
F-100D-90-NA, of the 612th TFS, loaded with napalm for a quick reaction strike against the VC from Phu Cat, April, 1971 (Norm Taylor)

INTRODUCTION

As this is written, the **F-100 Super Sabre** has disappeared from the hangars of active-duty fighter squadrons. But its service, as deterrent in peacetime, and weapon in wartime, has earned for the "Hun" an everlasting place of honor in the annals of military aviation history.

The F-100 began life as a company-funded project to improve on the basic **F-86 Sabre** design. Even as the record-breaking F-86A was entering squadron service, in early 1949, North American Aviation, not content to rest upon its laurels, initiated a development program which would eventually give birth to the **F-100 Super Sabre**. The program elicited no official interest until the F-86 was pitted against the Russian MIG-15 in the skies of Korea. The MIG 15, because of its small size and light weight, achieved through elimination of sophisticated avionics and armor, was able to out-climb, out-turn, out-accelerate, and fly higher than the F-86. (It was only because of a vastly superior pilot training program and higher level of experience that American pilots were able to rack up the amazing kill ratio that they did over the MIG-15.) Early Korean War experience made it painfully evident that the Communist Bloc had, in one quantum leap, brought themselves close to, if not level with, their western enemies in fighter design. The United States Air Force, unwilling to accept the expedient solution of eliminating avionics and armor to counter the threat of Soviet superiority that loomed on the horizon, began to show an immediate and intense interest in the North American project. In November of 1951 they awarded a contract to North American for two YF-100A prototypes and an F-100A production version. Thus was born the first of the famous "century series" of American fighters.

The Super Sabre be-



came the first fighter to attain level supersonic flight, achieving this milestone on its maiden flight, with North American test pilot George Welch at the controls, on May 25, 1953. The Phase II test program culminated with a simultaneous public unveiling and attempt on the world speed record. The public showing was a resounding success in terms of impressing the audience assembled for the F-100's debut, even though the new fighter failed to better the 3 km. course record by a margin sufficient to qualify as a record. (Later in the same week the Super Sabre did set a 15 km. closed course record.) The F-100 became operational in September of 1954, equipping the 479th fighter day wing, stationed at George AFB, California.

The F-100's early operational life was marred by a tragic accident that took the life of North American test pilot George Welch, and resulted in the grounding of all Super Sabres. Welch, who had gained fame early in his aviation career by shooting down four Japanese planes over Pearl Harbor on that "Day of Infamy" in 1941, had done all the early test flying of the Super



Munitions men loading M-39 cannon of F-100D-91-NA, assigned to 615th TFS, Phu Cat AB, March 1971. Super Sabre is also loaded with four 500 lb. bombs. (Norm Taylor)



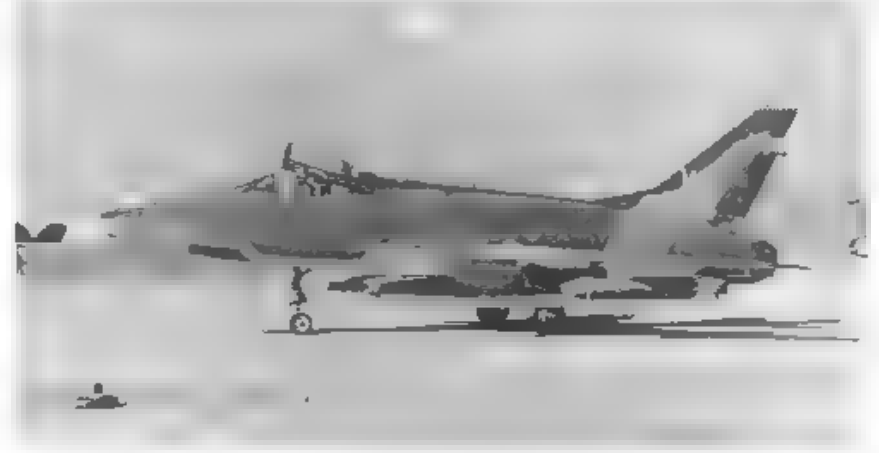
Hun driver about to check into his office. Super Sabre configured as this one would carry 12,000 lbs of fuel. Note full open position of speed brake, which can be used at any speed. (Relief valve prevents structural damage if speed brake is employed at too high a mach number.) (USAF)



F-100F-11-NA, of **306th TFS** was based at Tuy Hoa AB, photographed at Phu Cat in September of 1970. Automatic sequencer on ejection system of "F" models punches back-seater out ½ second before pilot, thus protecting him from blast of front seat rocket motor (Norm Taylor)



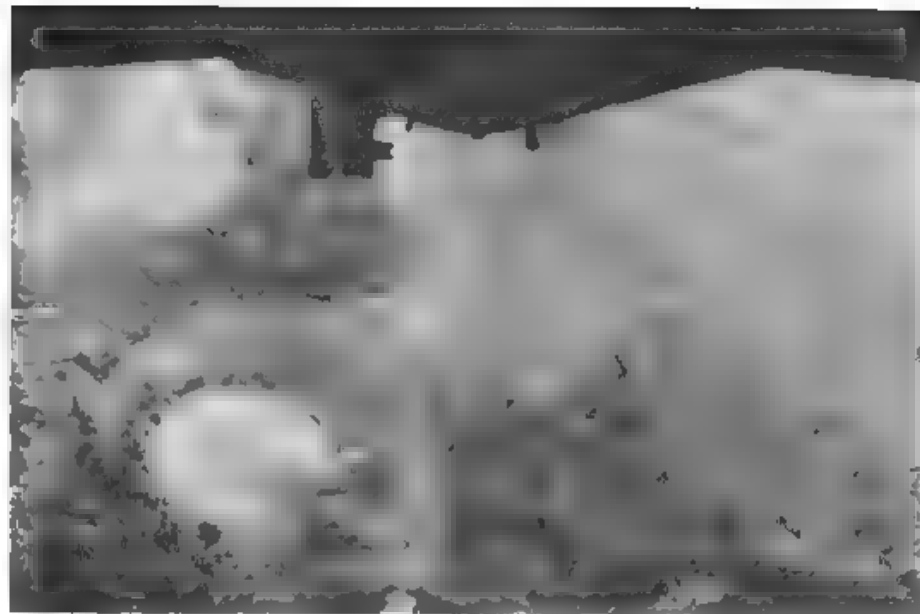
F-100D-61-NA "Jeanne Kay", of the **308th TFS**, based at Tuy Hoa, 1970 Green and White checkertail Note open drag chute doors under tail. (Norm Taylor)



Loaded with **500 lb. bombs** and **CBU dispenser**, **F-100D-61-NA** taxis out at Phu Cat for a mission against the Viet Cong. Pilot was Lt. "Buffalo" Chip Unsullied paint job indicates recent arrival from overhaul center. (Norm Taylor)



Hun pauses at arming pit, while munitions men manually charge the 20mm cannon, before taking off for a strike. When guns are fired, expended cartridge cases will be jettisoned through chutes in the underside of the fuselage, while belt links are retained internally. (USAF)



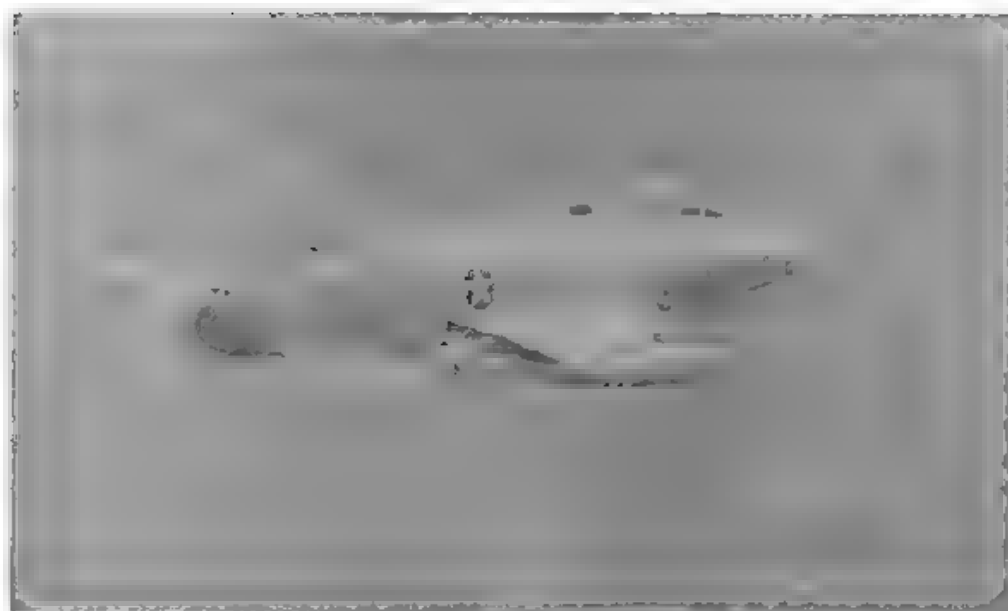
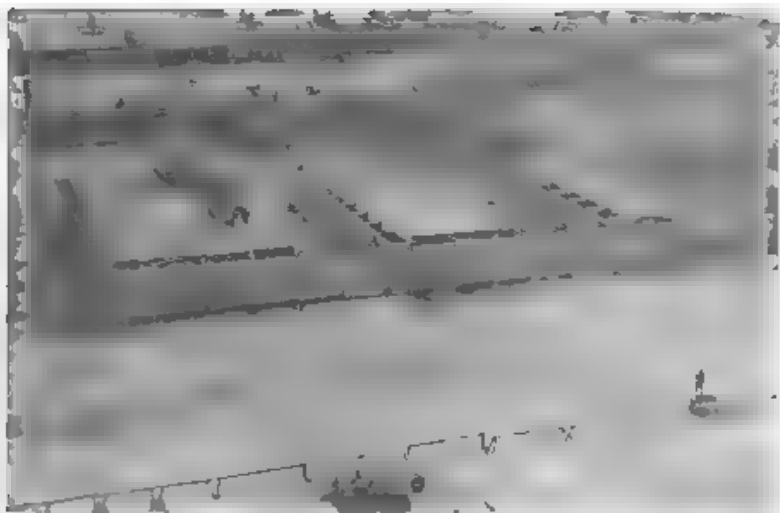
Rear looking camera catches explosion and resulting shock waves as a hard bomb explodes on an enemy position. (USAF via Norm Taylor)



615th TFS F-100D-56-NH of Col. Gregg P. Nolen, CO of 35th TFW. Photo taken as Col. Nolen taxied out at Phu Cat for a mission against "Hard" enemy positions. (Norm Taylor)



Super Sabre rolls in "hot". Note off-center position of arresting gear hook. The hook itself is flat steel spring which, when released, is held against the runway by spring tension (USAF)



After the Viet Cong made the wide open spaces untenable, Army Engineers began constructing hundreds of these revetments at Bien Hoa AB (top) (USAF) 481st TFS Hun begins pull-up after release of 750 lb. bomb. (right) (USAF via Dave Menard)



Enroute to the target, 1966. (USAF)



Nostalgia reigns supreme in this montage photo of the ceremony in which the Tactical Air Command relinquished it's active duty F-100's to the Air National Guard, at Cannon AFB, New Mexico. (USAF)



F-100D-75-NA, of the 355th TFS out of Tuy Hoa, was photographed at Udorn RTAB. It carried badge of 31st TFW on tail. (Ward Boyce)



F-100's of the 481st TFS photographed from atop revetment at Bren Hoa AB. Note blast defectors at rear of revetments in background. (Tom Lowe)

USAFE SUPER SABERS

When the last of United States Air Forces Europe F-100's departed from Europe in March of 1972, it rang down the curtain on more than sixteen years of F-100 duty in European skies. The first of USAFE's F-100's, an F-100C, arrived at Bitburg, Germany on March 12, 1956. Shortly afterward, it joined the **45th Day Fighter Squadron** at Sidi Slimane, Morocco. The 45th was the F-100 training transition unit for the USAFE. Within four months all four squadrons of the **36th Day Fighter Wing** at Bitburg were equipped with the Super Sabre. At the zenith of its European career, the F-100 equipped 18 squadrons.

In the early sixties replacement of the Hun began with the arrival of the first F-102's. The gradual erosion of F-100 dominance was continued as the F-105 arrived on the scene. It was accelerated with Air Force procurement of the F-4 Phantom, and completed when the controversial F-111 finally achieved operational status.



F-100D of the 48th TFW, loaded with LAU-32A/A rocket launcher on outboard pylon and SUU-21/A practice bomb dispenser on centerline. LAL-32 carried seven 2.75 rockets, while SUU-21 could carry up to six practice bombs (above) The same Super Sabre approaching for landing at Lakenheath, England, in September of 1968. It carries 4th ATAF shield on fuselage, applied for weapons meet in summer of 1968. (below) (Neal Schneider and George Pennick)



F-100D of 493rd TFS on final at RAF Lakenheath in September of 1970. (George Pennick)





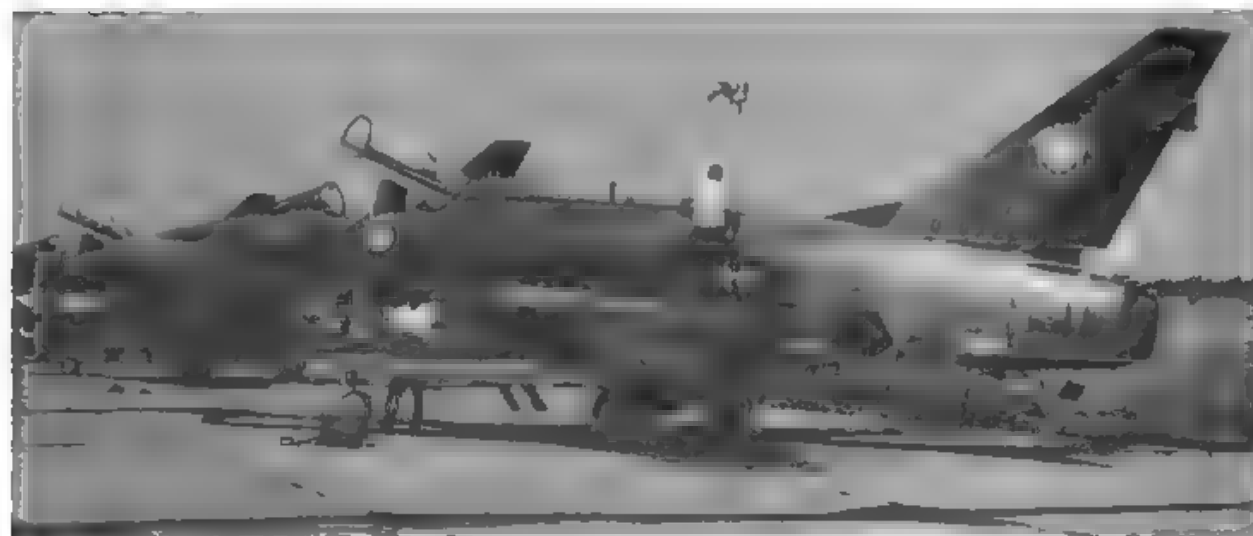
20th TFW



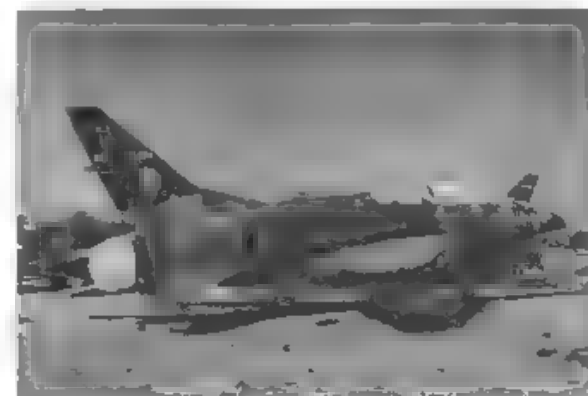
Formation final approach of a pair of F-100D's to RAF Wethersfield. These Huns belonged to the 20th TFW.
(George Pennick)



F-100F-16-NA of the 4950th Test Wing, Wright Patterson AFB, Ohio, was photographed at Kelly AFB, Texas in January, 1973. (Norm Taylor)



Weekend Warriors maintaining F-100D of the 110th TFS, Missouri Air National Guard, at Lambert Field, St Louis, in 1972 (Douglas Slowiak)



Former D C. Air Guard F-100C in mothballs at Davis Monthan AFB, 1972. (Douglas Slowiak)

Sabre He was widely respected, and his death was a shock which reverberated through North American like a bomb. But the promise of the F-100 was too bright to be extinguished by a single accident, and the smoke had hardly cleared before experts were hard at work trying to determine the cause.

The accident had occurred during structural tests, in which the F-100 Welch was flying came apart in a supersonic dive. Examination of the wreckage disclosed inherent instability, due to insufficient wing and vertical fin area. The vertical tail area was increased by 27% and a foot was added to each wing. These fixes were applied to all F-100's on the assembly line and those already in service, and the Super Sabre was soon flying again. It flew it's way to almost immediate fame, earning for it's designers the Collier Trophy in 1954.

The F-100 had originally been designed as an air superiority fighter, but the "A" model was the only pure air superiority version of the "Hun". The "B" was begun as an all-weather fighter, but later evolved into the F-107, which never saw the light of the production line. Along about this time, the Air Force began to realize that they were going to have to find a replacement for the F-84 fighter-bomber fleets, which were beginning to show signs of senility. The logical choice was the thoroughbred from North American, and so was born the F-100C. As the first of the fighter-bomber F-100's, the "C" model achieved an increasingly important position in the Tactical Air Command.

During the late forties and early fifties, the big bombers of SAC had carried the sole responsibility for delivery of our nuclear knockout punch. But as nuclear weapons became more sophisticated and compact, strategic planners realized the advantages of assigning some of this role to faster, more maneuverable fighters. Accordingly, TAC was admitted to the big-league retaliatory strike ballgame. This spawned development of the **F-100D**.

The "D" turned out to be the definitive version of the "Hun", with 1,274 examples eventually produced. It was far and away the most sophisticated fighter ever produced when it went into service in 1956. Aerodynamic improvements included a larger fin and rudder, leading edge slats, flaps, and wing fences. An improved weapons delivery system was added, along with an auto-pilot, and nose and tail radar warning. Some models were configured with a light weight doppler navigation system. The "D" also had improved air-to-air combat capability, as it was able to carry four **Sidewinder AAM's**.

One more version of the Super Sabre was to appear before the production lines were shut down in 1959. The **F-100F** was developed as a tandem two-seater for training purposes. It served well in that role and, when the **Hun** went to Vietnam, it was pressed into service as a high speed FAC. 333 of the "F" model were built.



The first YF-100 during a test flight, (above) and returning to parking area post-flight. (below) North American



EPILOGUE

The F-100 has been put out to pasture, to live out it's operational life in the peaceful pursuits of the Air National Guard. This last mission is one that the Super Sabre would probably have chosen for herself, for she will be in the hands of the pilots who flew her through some of the toughest sorties of her career. At one time in the long and distinguished career of the F-100, most of the Tactical Air Command Wings were Super Sabre equipped, and many of the pilots who flew her on active duty are now part time Hun drivers with various Air National Guard Squadrons. Thus, many of these squadrons claim pilot experience levels far above most active duty units.

The Super Sabre was a strong performer, capable of performing many diverse missions. These duties are being performed now by more modern types, including; The F-4 (air superiority), A-7 (tactical close support), F-111 (long range all-weather strike), and the F-106 (point intercept). Like so many sound basic designs, it's initial success inspired expansion of the role it was destined to play in the story of mid-twentieth century airpower. A total of 2,294 F-100's were produced. The airplane that ushered in the century series of fighters has outlasted many of it's contemporaries. It was a winner in the fifties, the sixties, and seems destined to play a role in U.S. aerial strength for some years to come. It is an old soldier that has not quite faded away.

SPECIFICATIONS

Engine: P & W J57-P-21A with 11,700 lb. static thrust, 16,950 lb. s.t. with afterburner.

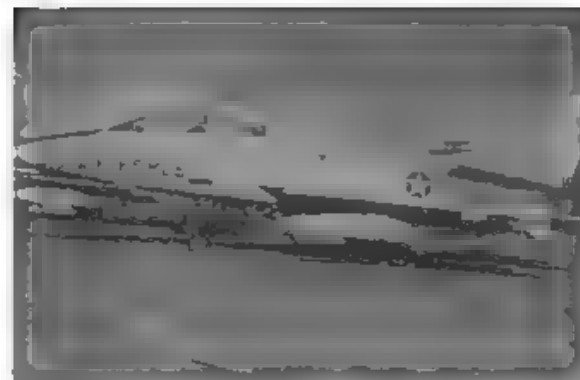
Performance. Top speed, 864 mph at 35,000 ft. (Mach 1.3)
810 mph at 8,000 ft (Mach 1.1)

Range: 550 miles (clean), at 565 mph. 1995 miles with drop tanks.

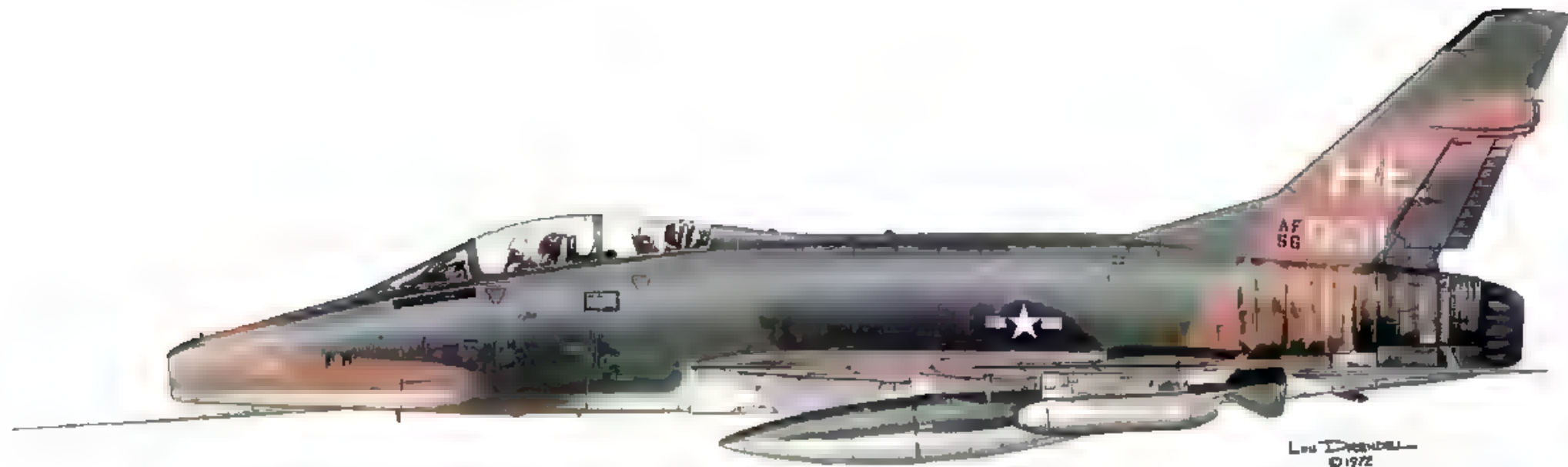
Initial rate of climb: 16,000 feet per minute.

Weights Empty, 21,000 lb. Normal load, 29,762 lb. Max load, 34,832 lb.

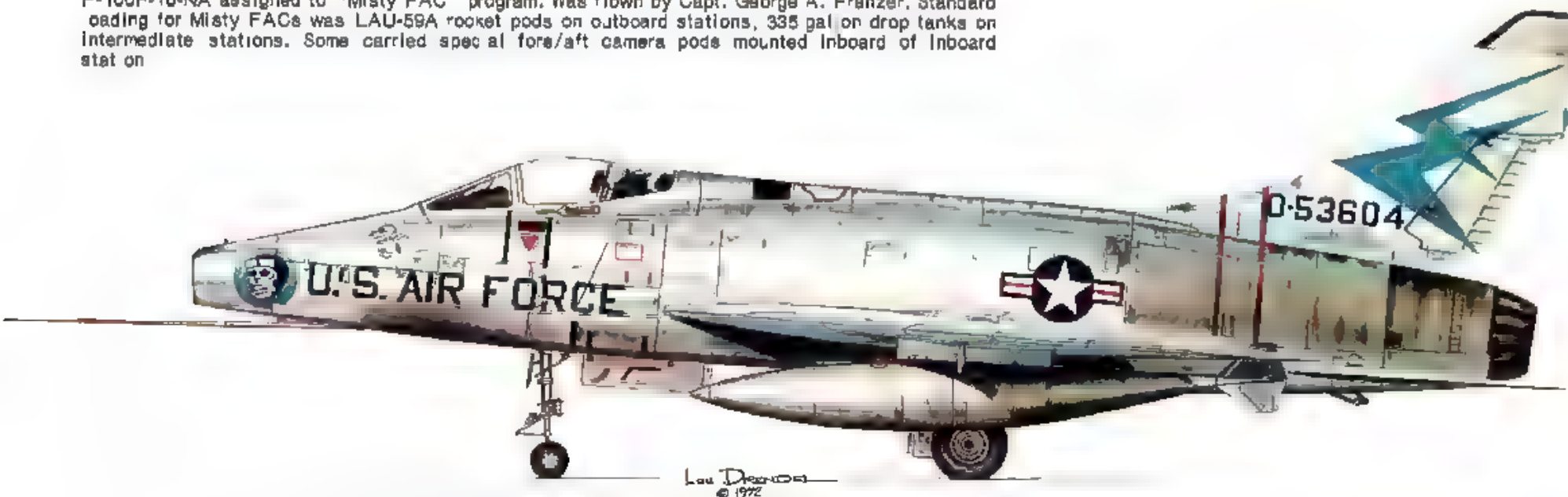
Service ceiling: 66,100 feet.



Super Sabres still on active duty with ADTC, Eglin AFB, Florida. (top) NF-100F of Arizona Air Guard, with F-102 afterburner modification. F-102 afterburner was installed on several 100's, as it provides positive opening of burner eyelids. Original 100 A/B eyelids didn't always open when they should have, causing compressor stalls. (middle left) (Dave Colbert) Jim Wallace straps in for a mission with Arizona Air Guard. (middle right) The author samples accommodations in the F-100 cockpit. (bottom)



F-100F-10-NA assigned to "Misty FAC" program. Was flown by Capt. George A. Franzer. Standard loading for Misty FACs was LAU-59A rocket pods on outboard stations, 335 gallon drop tanks on intermediate stations. Some carried special fore/aft camera pods mounted inboard of inboard station.



F-100D-25-NA of the 486th T.F.S., based at Bien Hoa Air Base, South Vietnam in 1965.



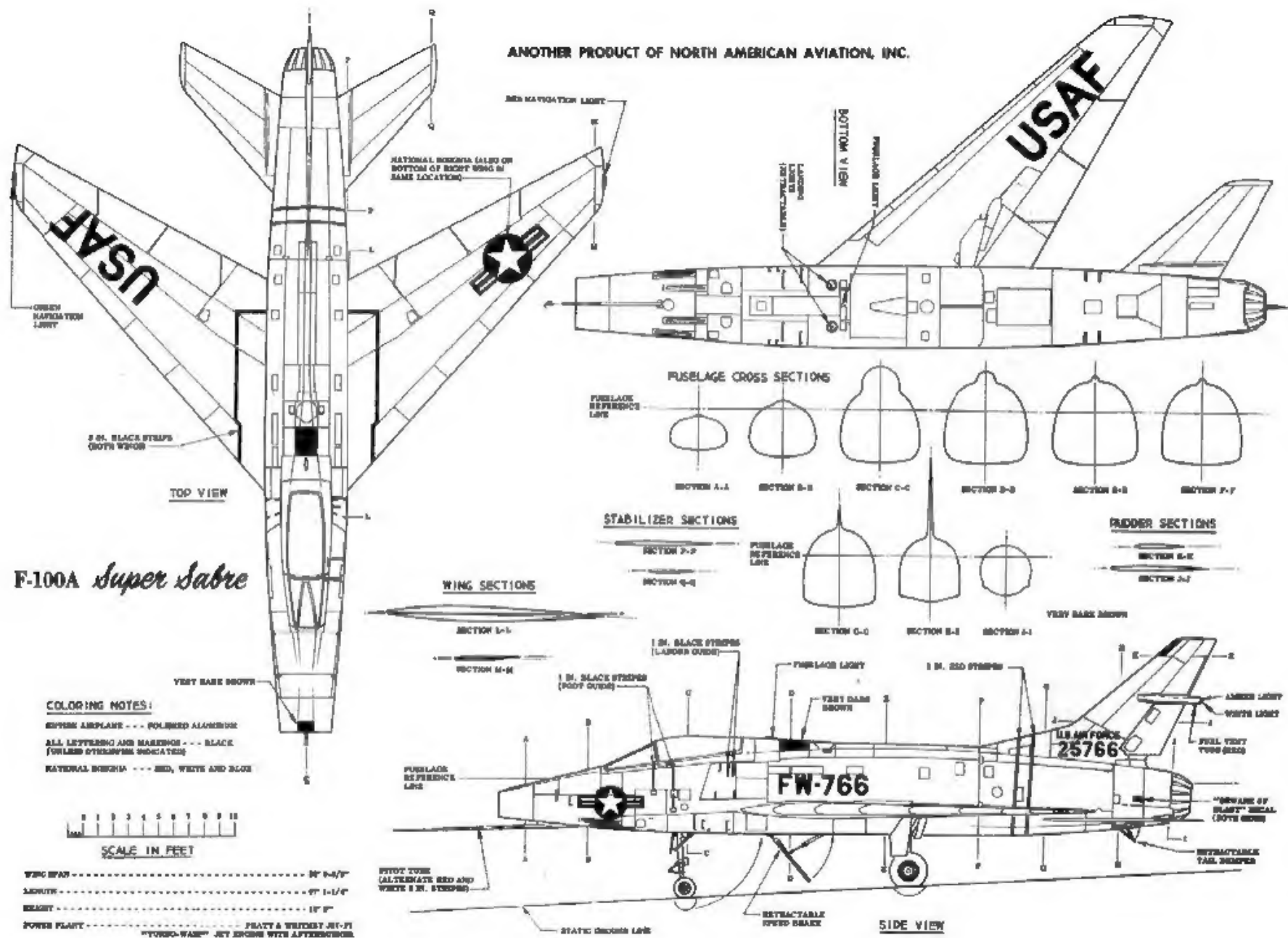
It's afterburner providing a thunderous fanfare, the second production **F-100A** leaps from the runway at L.A. International Airport. (USAF)



Initial production version of the **F-100A**, with short vertical fin, in flight over the mountains of Southern California. (USAF)



Formation of **F-100A's** of the **479th Fighter Day Wing**, out of George AFB, California. These Super Sabres have been modified with larger vertical fin and wings. (North American)





F-100-A's on the flight line at George AFB. (top) (North American)
 Ill-fated F-107A was begun as the original all-weather version of the F-100. It had a single J-75 engine, which delivered 23,500 lb. of thrust with afterburner. Only three were built. (left) (North American)



F-100A test firing its battery of four M-39 20mm cannon. F-100 carried 200 rounds per gun. M-39 is capable of cyclic rate of fire of 1,500 rpm. (left top) Ground crew removes entire tail section of F-100A, allowing them to perform maintenance on the J-57 engine. Location of fuselage fuel cells is evident in cutaway section. (top right) Badge of the 434th fighter/bomber squadron adorns the fuselage of F-100A at George AFB. (bottom) (North American)